

ABSTRACT

With this invention, in a nanoparticle production method, wherein nanoparticles are produced by irradiating a laser light irradiation portion 2a of a to-be-treated liquid 8 with a laser light, in which suspended particles are suspended, to pulverize the suspended particles in laser light irradiation portion 2a, laser light irradiation portion 2a of to-be-treated liquid 8 is cooled. In this case, by the cooling of to-be-treated liquid 8, the respective suspended particles are cooled in their entireties. When the portion 2a of this to-be-treated liquid 8 is irradiated with the laser light, the laser light is absorbed at the surfaces of the suspended particles at portion 2a. Since to-be-treated liquid 8 is cooled during this process, significant temperature differences arise between the interiors and surfaces of the suspended particles and between the surfaces of the suspended particles and the to-be-treated liquid at laser light irradiation portion 2a, and highly efficient nanoparticulation is realized.